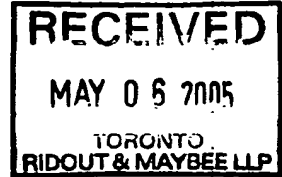


PATENT COOPERATION TREATY
PCT
INTERNATIONAL SEARCH REPORT
(PCT Article 18 and Rules 43 and 44)



Applicant's or agent's file reference 42121-0016	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below
International application No. PCT/CA2004/002119	International filing date (day/month/year) 13 December 2004 (13-12-2004)	(Earliest) Priority date (day/month/year) 12 December 2003 (12-12-2003)
Applicant THE UNIVERSITY OF MANITOBA ET AL		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
 - a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
 - b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.
2. ☒ Certain claims were found unsearchable (see Box No. II).
3. ☐ **Unity of invention is lacking** (see Box No. III).
4. With regard to the **title**,
☐ the text is approved as submitted by the applicant.
☒ the text has been established by this Authority to read as follows :

Methods and compounds for modulating triglyceride and VLDL secretion.
5. With regard to the **abstract**,
☒ the text is approved as submitted by the applicant.
☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. With regard to the **drawings**,
 - a. the figure of the **drawings** to be published with the abstract is Figure No.
☐ as suggested by the applicant.
☐ as selected by this authority, because the applicant failed to suggest a figure.
☐ as selected by this Authority, because this figure better characterizes the invention.
 - b. ☒ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/CA2004/002119**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☒ Claim Nos. : 1, 2, 5, 6 and 30

because they relate to subject matter not required to be searched by this Authority, namely :

Remark: Although claims 1, 2, 5, 6 and 30 are directed to a method for treatment of the human or animal body, which the Authority is not required to search under Rule 39.1(iv) of the PCT, the search has been carried out and based on the alleged effects of the compositions.

2. ☐ Claim Nos. :

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :

3. ☐ Claim Nos. :

because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002119

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K 38/48, G01N 33/92, C12Q 1/02, A61K 38/17, A61K 45/00, A61P 3/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

IPC 7 A61K 38/48, G01N 33/92, C12Q 1/02, A61K 38/17, A61K 45/00, A61P 3/06

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Epodoc, STN, Canadian Patent Database, Medline. Keywords: Map1LC3, GABARAP, GATE16, PI'3 kinase, autophagocytosis, VLDL, triglyceride, apolipoprotein, apoB, wortmannin, rapamycin, oleate, EPA.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	WO 03/066086 DEVELOGEN AKTIENGESELLSCHAFT FUR ENTWICK- LUNGBIOLOGISCHE FORCHUNG (14.08.2003) whole document. In particular, claims 1, 13, 20-25.	1-8, 28-30
Y		1-8, 28-30
X	MORRISETT, J.D. et al., <i>Effects of sirolimus on plasma lipids, lipoprotein levels, and fatty acid metabolism in renal transplant patients</i> . Journal of Lipid Research (2002) Vol.43, pp1170-1180 whole document.	1-8, 28-30
Y		1-8, 28-30
X	FISHER, W.R., et al., <i>Apolipoprotein B metabolism in hypertriglyceridemic diabetic patients administered either a fish oil- or vegetable oil-enriched diet</i> . Journal of Lipid Research (1998) Vol.39, pp.388-401. whole document.	1-8, 28-30
Y		1-8, 28-30
Y	FISHER, E.A. et al., <i>The Triple Treat to Nascent Apolipoprotein B</i> . Journal of Biological Chemistry (2001) Vol.276, No.30, pp.27855-27863 whole document.	1-8, 28-30

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

18 April 2005 (18-04-2005)

Date of mailing of the international search report

03 May 2005 (03-05-2005)

Name and mailing address of the ISA/CA
Canadian Intellectual Property Office
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2004/002119

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
WO03066086	14-08-2003	AU2003206854 A1	02-09-2003
		AU2003226973 A1	02-09-2003
		EP1471934 A2	03-11-2004
		WO03066086 A2	14-08-2003
		WO03066087 A2	14-08-2003